IN THE CLAIMS:

Please amend claim 22 and add new claims 30-39, as follows.

Claims 1-17 (Cancelled)

18. (Previously Presented) A communications device, comprising:

a plurality of network ports, said plurality of network ports including a trunk group formed of a subset of the plurality of network ports, said trunk group communicating with aggregated network links;

a packet routing unit connected to said plurality of network ports, said packet routing unit receiving a packet, said packet including a source address value, and a destination address value, said packet routing unit determining said trunk group as a destination port; and

a load balancing unit in communication with the packet routing unit, said load balancing unit configured to select the destination port from the subset of network ports in the trunk group, said destination port being determined as a function of a source port ID value corresponding to a source port for the packet,

wherein said load balancing unit balances a distribution of packets among the subset of network ports of the trunk group.

19. (Previously Presented) A communications device as recited in claim 18, wherein said load balancing unit generates the source port ID value based upon the source address value of the packet, and therefore selects the destination port as a function of the source address value.

20. (Previously Presented) A communications device as recited in claim 18, wherein said packet routing unit identifies the trunk group as a single logical port.

21. (Previously Presented) A communications device as recited in claim 18, wherein said packet routing unit includes a packet routing table which generates a trunked port ID value based upon the destination address value for the packet.

22. (Currently Amended) A communications device as recited in claim 21, wherein said load balancing unit comprises:

a systems administration unit providing a plurality of port mapping values, each port mapping value being associated with a corresponding one of the plurality of network ports, each port mapping value including a plurality of port select values, each port select value being associated with a corresponding one of a plurality of trunked ports of the ~~switch~~ communications device, each of the plurality of trunked ports including a corresponding subset of the plurality of network ports, each of the port select values

indicating a corresponding selected one of the corresponding subset of the network ports of the trunk group;

a trunk port configuration unit coupled to receive said port mapping values from said system administration unit, said trunk port configuration unit including a plurality of configuration registers for storing corresponding ones of the port mapping values; and

an address resolution circuit connected to said trunk port configuration unit.

23. (Previously Presented) A communications device as recited in claim 22, wherein said address resolution circuit comprises:

a first multiplexer having a plurality of inputs for receiving corresponding ones of said port mapping values, a control port responsive to said source port ID value, and an output providing a selected one of said port mapping values in response to said source port ID value being applied to said control port of said first multiplexer,

a destination register coupled to said first multiplexer for storing said selected port mapping value, and having a plurality of outputs each providing a corresponding one of said port select values, and

a second multiplexer having a plurality of inputs coupled to said outputs of said destination register, a control port responsive to said trunked port ID value, and an output providing a selected one of said port select values in response to said trunked port ID value being applied to said control port of said second multiplexer, said selected port select value indicating said destination port.

24. (Previously Presented) A communications device as recited in claim 22, wherein said system administration unit comprises a processing unit and a memory, and wherein said port mapping values are programmable.

25. (Previously Presented) A communications device as recited in claim 18, wherein said load balancing unit comprises:

a register for storing the source address value of the packet, the register including at least one register output, said at least one register output providing a port select value derived from the source address value, the port select value for indicating a selected one of a plurality of network ports of a destination trunked port for the packet.

26. (Previously Presented) A communications device as recited in claim 25, further comprising a multiplexer having a plurality of inputs for receiving a corresponding one of the port select values, a control port responsive to a predefined bit select value, and an output providing a selected one of said port select values.

27. (Previously Presented) A communications device as recited in claim 18, wherein said load balancing unit comprises:

a first register for storing the source address value of the packet, said first register including at least one output providing a corresponding first value derived from said source address value; and

a second register for storing the destination address value of the packet, said second register including at least one output providing a second value derived from said destination address value.

28. (Previously Presented) A communications device as recited in claim 27, wherein said load balancing means further comprises:

an exclusive NOR logic unit responsive to said first and second values, said exclusive NOR logic unit providing a port select value for indicating a selected one of the plurality of network ports of the trunk group.

29. (Previously Presented) A communications device as recited in claim 18, wherein each trunk group provides a bandwidth of approximately X times Y, wherein X is a bandwidth of each network link, and Y is a number of network links associated with the trunk group.

30. (New) A communications apparatus, comprising:

a plurality of network ports, said plurality of network ports including a trunk group formed of a subset of the plurality of network ports, said trunk group communicating with aggregated network links;

a packet routing means connected to said plurality of network ports, for receiving a packet, said packet including a source address value, and a destination address value, said packet routing unit determining said trunk group as a destination port; and

a load balancing means in communication with the packet routing means, for selecting the destination port from the subset of network ports in the trunk group, said destination port being determined as a function of a source port ID value corresponding to a source port for the packet,

wherein said load balancing means balances a distribution of packets among the subset of network ports of the trunk group.

31.   (New) The apparatus of claim 30, further comprising:

a systems administration means for providing a plurality of port mapping values, each port mapping value being associated with a corresponding one of the plurality of network ports, each port mapping value including a plurality of port select values, each port select value being associated with a corresponding one of a plurality of trunked ports of the communications apparatus, each of the plurality of trunked ports including a corresponding subset of the plurality of network ports, each of the port select values

indicating a corresponding selected one of the corresponding subset of the network ports of the trunk group;

a trunk port configuration means for receiving said port mapping values from said system administration unit, said trunk port configuration means including a plurality of configuration registers for storing corresponding ones of the port mapping values; and

an address resolution means for address resolution, connected to said trunk port configuration means.

32. (New) The communications apparatus according to claim 31, wherein said address resolution means comprises:

a first multiplexer means having a plurality of inputs, for receiving corresponding ones of said port mapping values, a control port responsive to said source port ID value, and an output providing a selected one of said port mapping values in response to said source port ID value being applied to said control port of said first multiplexer,

a destination register means coupled to said first multiplexer means for storing said selected port mapping value, and having a plurality of outputs each providing a corresponding one of said port select values, and

a second multiplexer means having a plurality of inputs coupled to said outputs of said destination register means, a control port responsive to said trunked port ID value, and an output, for providing a selected one of said port select values in response to said

trunked port ID value being applied to said control port of said second multiplexer, said

selected port select value indicating said destination port.

33.   (New) The communications apparatus according to claim 31, wherein said

system administration means comprises a processing means for processing and a memory

means for storing, and wherein said port mapping values are programmable.

34.   (New) A method for load balancing, the method comprising:

providing a plurality of network ports, said plurality of network ports including a

trunk group formed of a subset of the plurality of network ports, said trunk group

communicating with aggregated network links;

receiving a packet by a packet router, said packet including a source address value,

and a destination address value, said packet routing unit determining said trunk group as

a destination port; and

selecting, by a load balancing unit in communication with the packet router, the

destination port from the subset of network ports in the trunk group, said destination port

being determined as a function of a source port ID value corresponding to a source port

for the packet; and

balancing a distribution of packets among the subset of network ports of the trunk

group.

35.   (New) The method according to claim 34, further comprising:

generating the source port ID value based upon the source address value of the packet, and

selecting the destination port as a function of the source address value.

36.   (New) The method according to claim 34, further comprising identifying the trunk group as a single logical port.

37.   (New) The method according to claim 34, further comprising generating a trunked port ID value based upon the destination address value for the packet, by a packet routing table.

38.   (New) The method according to claim 37, further comprising:

providing a plurality of port mapping values, each port mapping value being associated with a corresponding one of the plurality of network ports, each port mapping value including a plurality of port select values, each port select value being associated with a corresponding one of a plurality of trunked ports of the communications device, each of the plurality of trunked ports including a corresponding subset of the plurality of network ports, each of the port select values indicating a corresponding selected one of the corresponding subset of the network ports of the trunk group;

receiving said port mapping values; and

storing corresponding ones of the port mapping values.

39.   (New) The method according to claim 38, further comprising:

receiving corresponding ones of said port mapping values;

providing a selected one of said port mapping values in response to said source port ID value being applied to said control port of said first multiplexer;

storing said selected port mapping value, and having a plurality of outputs each providing a corresponding one of said port select values, and

providing a selected one of said port select values in response to said trunked port ID value, said selected port select value indicating said destination port.